Panel Discussion

Dynamics of inter-firm technology partnering: good practices from Europe (Eureka) and their applicability to Iberoeka

Towards Iberoamerican Technology Platforms: results of the CDTI-sponsored study on Iberoeka

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The presentation is structured in four parts.....

- Brief description of IBEROEKA (IBK) Programme.
- Description of the R&D&I corporate financing models in the IBK area.
- Analysis of the strategic IBK areas.
- Some conclusions.

In 2001-2002, the **Evaluation of the First 10 Years of IBEROEKA** was carried out.

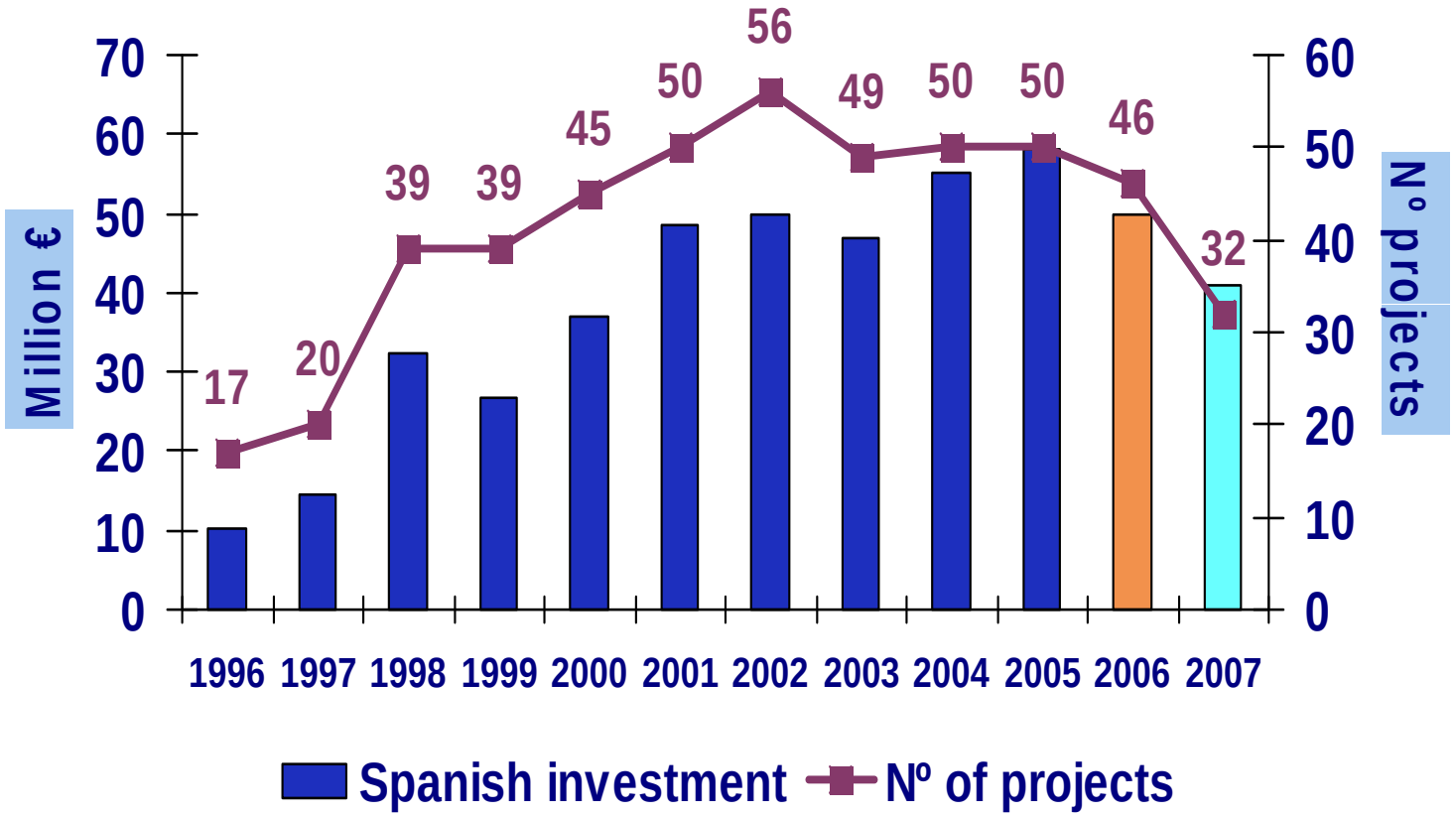
In 2008, the **IBEROEKA 2010 Reactivation Plan** study was undertaken.

I. Brief description of IBEROEKA Innovation Projects

IBEROEKA Innovation Projects....

- Are an instrument aimed at the industrial sector in order to boost technological cooperation between companies.
- Were established in 1991 as part of the CYTED Programme and participate 21 countries (19 LA + Portugal + Spain).
- Collaborative projects focussed on market-oriented R&D.
- In each project companies choose their partners and the collaboration agreement with them, the risk share, the costs taken on by each partner and how the profits from the project will be distributed in the operation stage.
- Minimum 2 participants from 2 different countries.
- Permanently open call for proposers all along the year.
- Decentralised funding: no “common pot” nor exchange of funds.
- Funding entities or centers can be one (even the same) or several ones.
- Up to the end of 2007 a total of 567 projects had been registered.

Evolution of projects participated by Spain: Asymmetry and Decrease



II. R&D&I Corporate Financing Models

The situation in IBK countries - A high degree of dispersion, with 4 groups of countries:

- **Extensive** aid system (Argentina, Brasil, Chile, Colombia, México, Panamá, Portugal and Spain).
- **Less extensive** aid system (Costa Rica, Cuba, Perú, Uruguay and Venezuela).
- **Weak** aid system (Bolivia, Ecuador, El Salvador, Guatemala, Nicaragua and Paraguay).
- **No aid** (Honduras and Rep. Dominicana).

Justification of technological cooperation (different approaches):

- The interactive nature of the technological innovation process means that there is a need for companies to cooperate with other organisations in order to develop technological research and development activities (Mowery and Rosenberg, 1989).
- Networks are moving from being seen as flexible and effective instruments for international scientific cooperation to being seen as a form of organising work for the production of technology and the creation of scientific knowledge (Albornoz and Estébanez, 1998; Callon et al, 1999).

Financing models

1. DIRECT FINANCING LINES

1.1. Competitive direct public financing model

1.2. Competitive indirect public financing model

3. INDIRECT FINANCING LINES

3.1. Decentralised indirect financing model

3.2. Centralised indirect financing model

2. MIXED MODEL

Competitive financing model with funds from Multilateral financing organisations.

1.1. Competitive direct public financing model

- Programmes specifically aimed at the participation of IBK project beneficiaries.
- The evaluation and selection of the applications is carried out on a competitive basis between the various IBK proposals.
- This financing model is present in a limited number of countries participating (Argentina, Panamá and Spain).

1.2. Competitive indirect public financing model

- Programmes aimed at supporting technological development projects in general.
- It is open to projects which involve national and international cooperation, including IBK projects.
- This financing model is present in most of the Latin American countries participating in IBK.

2. Mixed financing model

- Award of subsidies or loans for the support of private company R&D projects.
- The funds are awarded by IDB or CAF to the national governments.
- The IBK projects are not currently prioritised. This financing model is present in some countries participating in IBK (Argentina, Perú).

3.1. Decentralised indirect financing model

- Complementing the aid that a country provides to technological cooperation projects with funds managed by financial institutions and subsidised by the ONCYTs (National Science and Technology Organisations)/OGIs (IBEROEKA Management Organisations).
- Type: loan at preferential interest rates (below market conditions with the subsidy of the interest rate of the ONCYT/OGIs).
- Reference: *CDTI-Banking System for Technological Innovation Line* developed in Spain from 2005-2006, and expected to be launched again with €200 million (2008-2009).

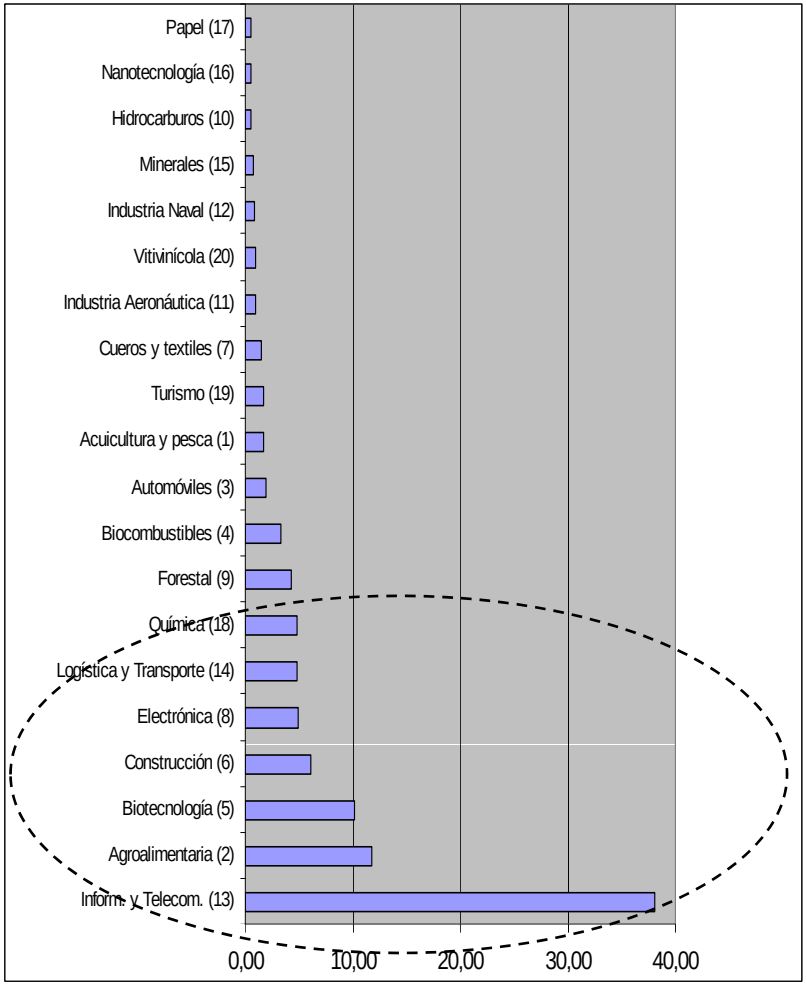
3.2. Centralised indirect financing model

- Reference: *Risk Sharing Finance Facility* of EIB and European Commission.
- Aim is to create a fund between a Multilateral Financial Institution (MFI) and the interested countries which improve the capacity of the MFI to provide loans or guarantees to be extended without taking on a high level of risk, as it is shared by all the participants.
- Type: subsidised loan (for definition phases of individual projects and instrumental activities, i.e. Platforms/Umbrella Programmes).
- It also contributes to increasing the investment of private sector initiatives in R&D&I activities through the leverage effect.

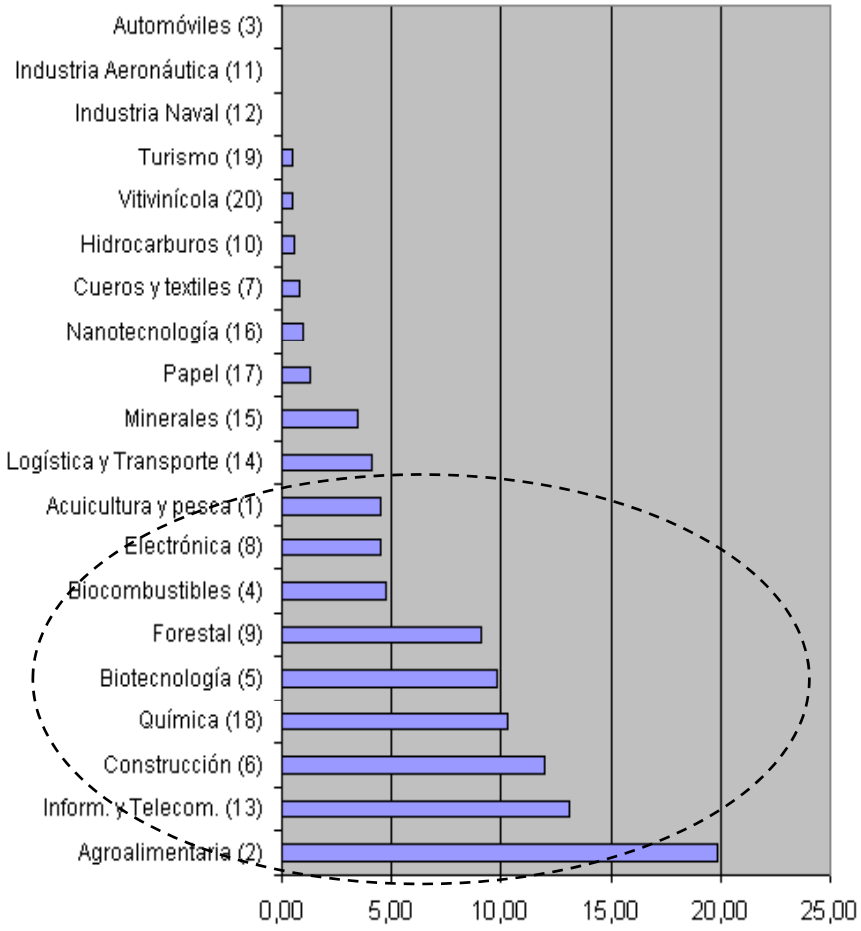
III. Analysis of Strategic Areas

Technological areas

IBEROEKA Projects (%)

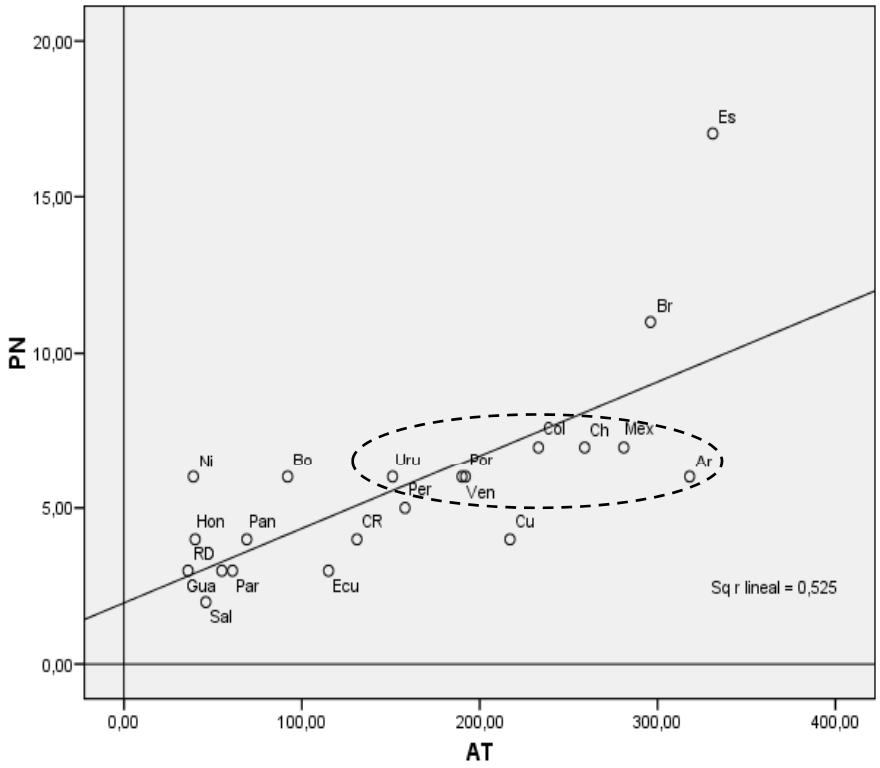


CYTED Actions (%)

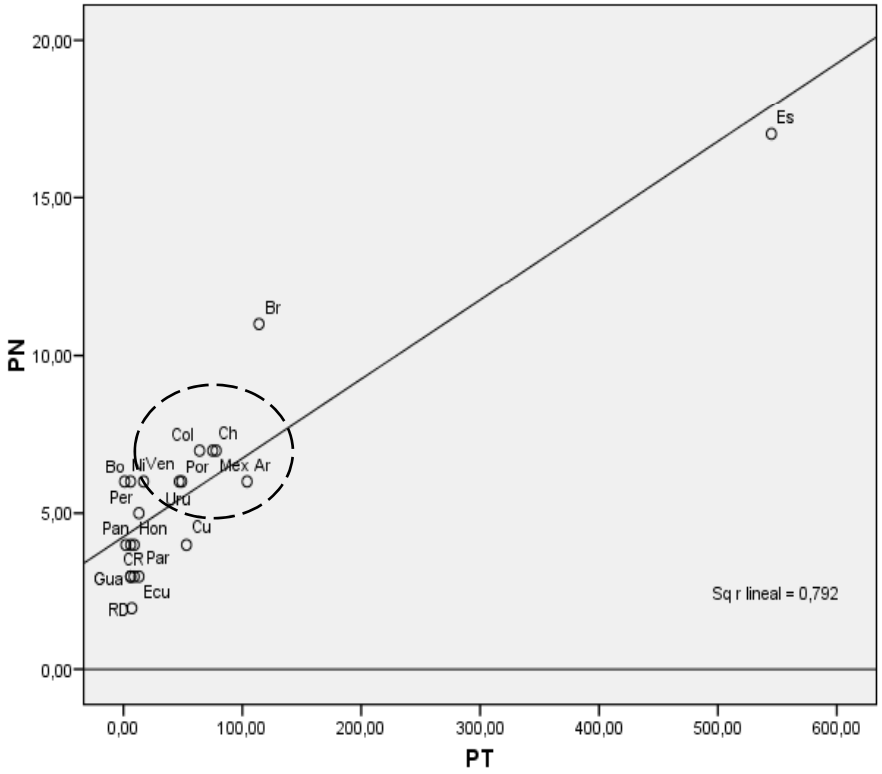


National R&D Priorities

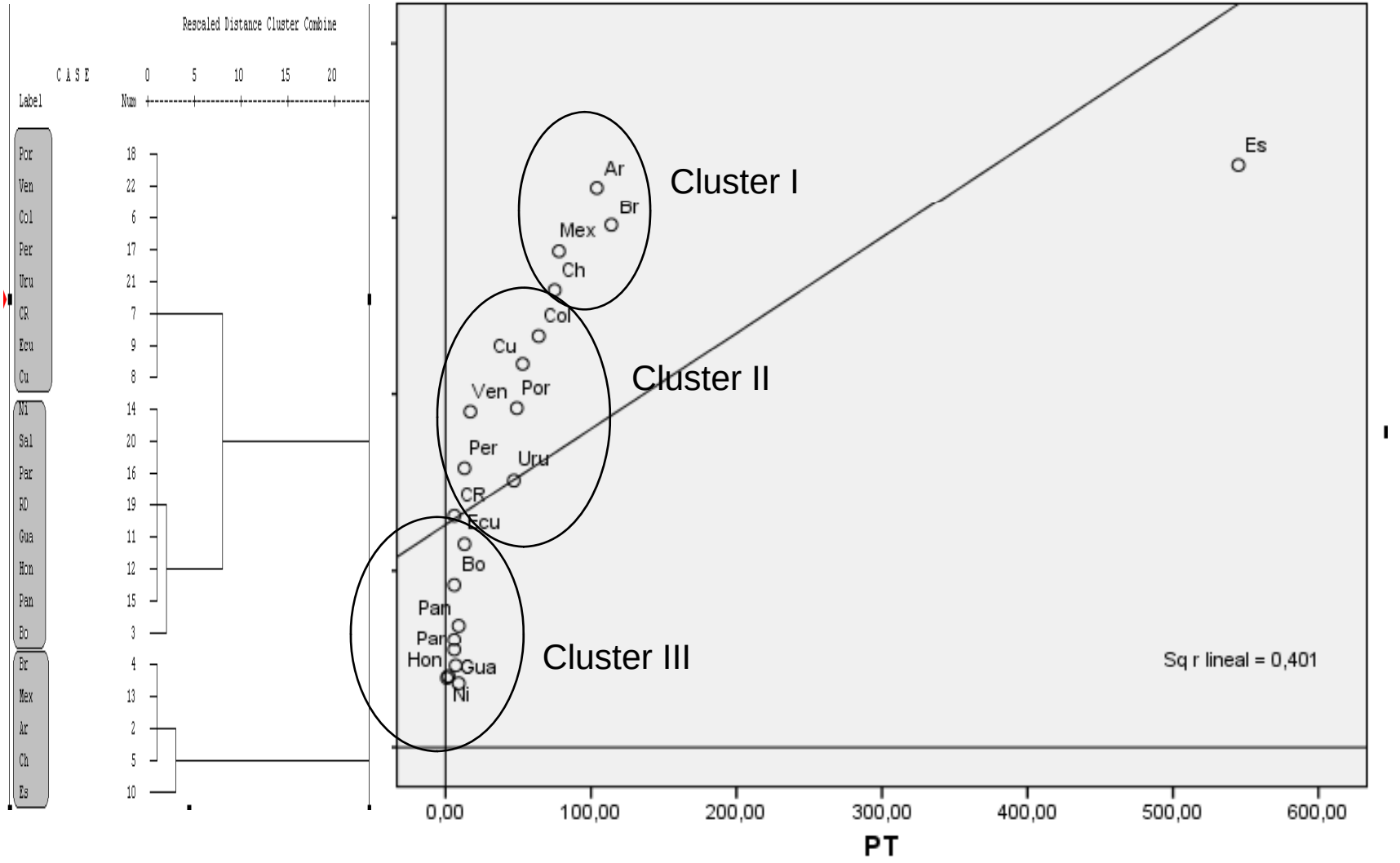
National R&D Priorities versus CYTED Actions



National R&D Priorities versus IBEROEKA Projects



IBEROEKA Projects-CYTED Actions



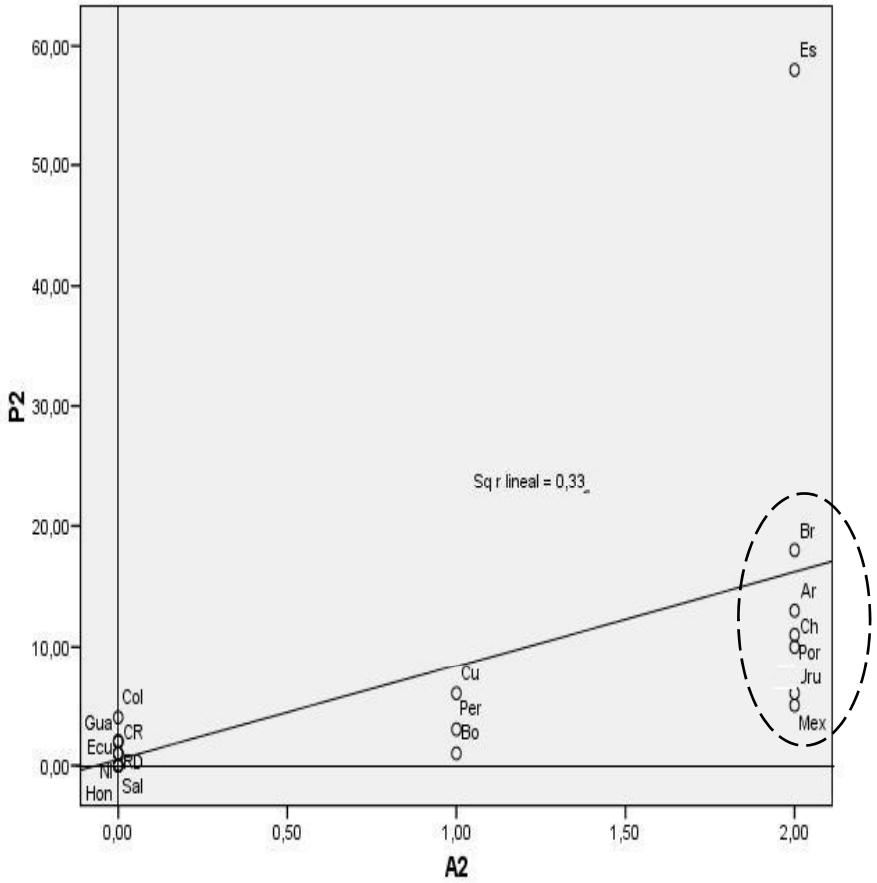
Technological Areas and Clusters

Technological areas	Countries
ICT	Argentina, México, Brasil, Colombia, Cuba, Chile.
Agro-food	Argentina, Brasil, Chile, Portugal, Uruguay, México.
Biotechnology	Argentina, Brasil, México, Cuba, Portugal, Chile, Uruguay.
Construction	Argentina, Colombia, Brasil.
Electronics	España, México, Chile, Brasil.
Transport&Logistics	México, Brasil, Portugal, Argentina, Chile, Colombia.
Chemical	España, México, Chile, Brasil.

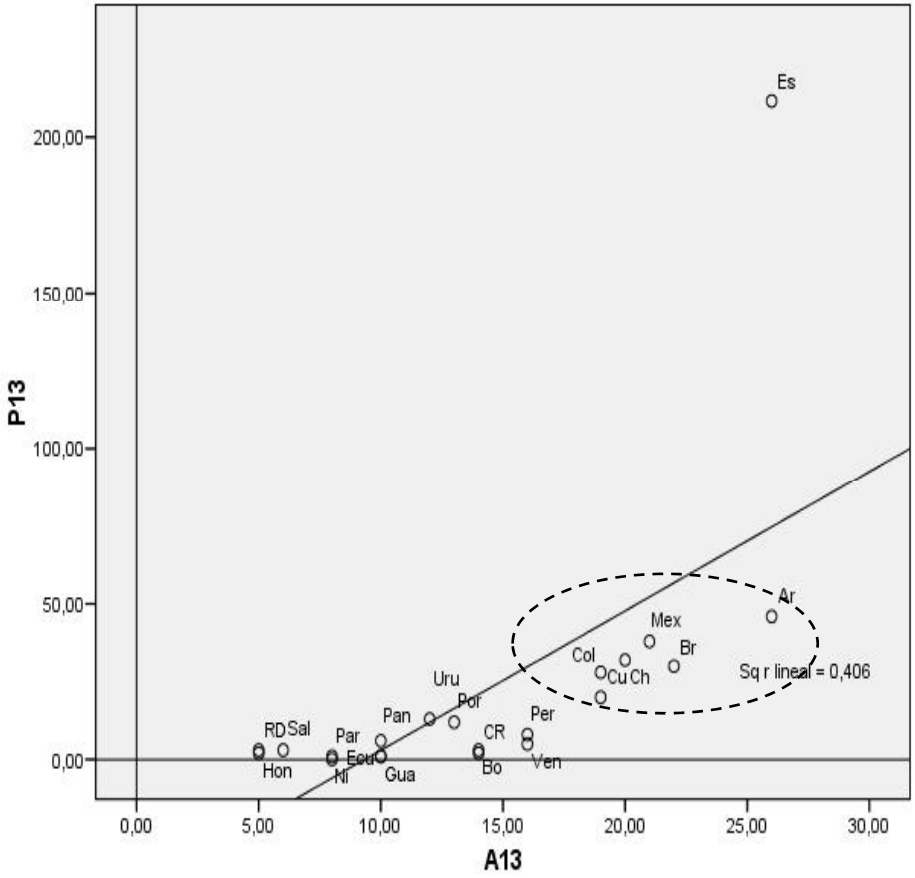
Areas with few participation, but with special interest:

- Automobile - Argentina, México, Brasil, Colombia.
- Aeronautics - Brasil, Argentina.
- Tourism - R. Dominicana, Costa Rica, Mexico, Colombia, Argentina, Chile, Brasil.
- Wine - Chile, Brasil, Argentina.

Agro-food



ICT



As a result of the First 10 Years of IBEROEKA Evaluation.....

Technology transfer mechanisms more used in the IBK projects:

- Technological alliances
- Production licenses
- Commercial use agreements
- Technology license agreements

Technological cooperation barriers:

- Markets changing
- Low external financing
- Communication problems between partners

IV. Some conclusions

Aims.....

- Developing actions focused on either technological or geographical areas, with the aim of improving the efficiency of promotion actions.
- Designing Strategic Umbrella Programmes which have the advantage of focusing efforts and bringing together both the technology producers and the natural clients.
- It is interesting to note that those areas in which innovation, according to Pavitt's classification, is orientated more towards the suppliers of equipment (Transport&Logistics, ICT, Aeronautics and Tourism) offer greater opportunities for diffusion and technology demand models.
- Connecting with the 7FP of the European Union and promoting the development of patents.
- Carrying out a viability study for the creation of a Multilateral Fund with the participation of a Multilateral Financial Institution to support the development of technological cooperation projects.
- Analysing the creation of a Secretariat to manage the Fund and the coordination of the IBK projects.